

TITLE: Circuit Lockout/Tagout Guidelines for Floor Coordinators

CATEGORY: Operations

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ABSTRACT:

These work guidelines apply to the Lockout/Tagout (LO/TO) of 110/208 V T (technical) panels only. If LO/TO of a 480V panel is required, call PFS to do the LO/TO.

Lockout/Tagout

Be sure that your training is up to date. Required courses are: ESH114, ESH371, and ESH375 (NFPA 70E)

1. Floor Coordinators or PFS must supply facility lockout of a circuit that a construction or service contractor will be working on. The facility lockout is applied first.
 - A) Construction and service contractors must supply their own locks.
 - B) Construction and service contractors shall **NOT** use a Master red banded lock.
2. If the Floor Coordinator is requesting PFS to lock out a circuit that is powering a panel, verify that everything connected to that panel can be deenergized.
 - A) Call 4-1001 to contact the PFS Operations mechanic.
 - B) Complete the form labeled Request for Electrical Lockout/Tagout.
3. Each ANL employee who is to work on the equipment must place a lock on the energy-isolating devices, with approved locks obtained from the nearest lockout station.
4. Turning off and locking out a circuit breaker
 - A) Safety glasses, long sleeved cotton shirt and long cotton pants must be worn.
 - B) Check the label on the outlet for the breaker and source location.
 - C) Check the panel legend on the inside of the breaker panel to assure that the information matches.
 - D) Since circuits generally have more than one receptacle, check all receptacles on the circuit to verify that all equipment plugged into the circuit may be shut down/disengaged for the task. Use the panel legend and outlet labels to identify all affected outlets; if this information is not sufficient, contact PFS for assistance.
 - E) Get locking devices to isolate the circuit.
 - F) Get an approved lock and tag obtained from the nearest lockout station.
 - G) Identify the circuit breaker to be locked out.
 - H) Stand to the side of the panel and place the breaker switch in the OFF position. Do not stand directly in front of the breaker as it is being operated.
 - I) Apply locking device.
 - J) Apply lock and tag with employee information to the locking device.
 - K) Enter required information in the LO/TO logbook.

5. Verification

Prior to starting work on equipment that has been locked out, all personnel who are to work on the equipment must verify that it is isolated and deenergized. For example, if a motor is hard wired into the circuit, turn on the motor control switch to verify that it is not working; in some instances, a non-contact sensing device can also be used, see below. Note that the lockout may be verified by

witnessing the actual verification by another person, e.g. the Floor Coordinator can be witness to actual verification by PFS personnel. Whichever procedure is chosen, the Floor Coordinators must verify that the circuit that they have locked out has been deenergized.

- A) **Caution: Auto-start switches must be reset to neutral or off position after the test.**
 - B) Although the APS or PFS employees are not “working” on the circuit, they provide the facility lockout and must verify that the system is deenergized.
 - C) LO/TO verification can be performed using a non-contact voltage sensing device for work $\leq 300\text{V}$ exposed circuit elements or $\leq 600\text{V}$ insulated or covered circuit elements:
 - i. Wear proper PPE: non-conductive safety glasses, long sleeve cotton shirt, and long cotton pants.
 - ii. Floor Coordinators can use a Greenlee Model 1010 or approved substitute touchless AC voltage indicator.
 - iii. Verify voltage sensing device operation.
 - iv. Sense voltage & loss of voltage upon isolation (when circuit is de-energized).
 - v. Re-verify voltage sensing device operation.
6. Place the LO/TO key in the nearest FC office key cabinet.
7. The equipment is now locked and tagged. Work may now begin.

Release from Lockout/Tagout

1. Follow the “Lockout/Tagout Key Transfer Guidelines for Floor Coordinators” to remove the lock if the release from lockout has to be carried out by a different Floor Coordinator from the one who applied the lock.
2. When work is complete, make sure all controls are returned to “OFF”, all tools are removed, and all personnel are clear of the equipment before start of unlocking procedures. The locks and tags must be removed by the individuals who installed them or by the authorized back-up.
3. When switching on a breaker, stand to the side of the panel. Do not stand directly in front of the breaker.
4. Test equipment after lock removal to confirm it is functioning properly.
5. Notify the affected employees that the machine or system is back in service.
 - A) If possible have the employee responsible for the equipment present when returning power to the equipment.
 - B) Verbal notification is acceptable.
6. Locks must be returned to the lockout station and the logbook entry completed.

REFERENCES

Environment, Safety and Health Manual - ANL-East:
[Section 7.1 Control of Hazardous Energy and Lockout/Tagout](#)